



PATENT
Atty. Dkt. AMAT/5730/TCG/WCVD

1765

160

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:
Yoo, et al.

Serial No.: 10/023,125

Confirmation No.: 4585

Filed: December 17, 2001

For: Pulse Nucleation Enhanced
Nucleation Technique for
Improved Step Coverage
and Better GAP Fill for
WCVD Process

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Group Art Unit: 1765

Examiner: Unknown

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SEP 23 2004

TC 1700

MAIL STOP AMENDMENT
Commissioner for Patents
P.O. Box 1450
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| CERTIFICATE OF MAILING 37 CFR 1.8 | |
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| 9/15/04 Date | <i>Kit [Signature]</i> Signature |

Dear Sir:

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

The Applicants, and the Attorney who signs below on the basis of the information supplied by the inventor and the information in his file, submit herewith patents, publications, or other information of which they are aware, which may be material to the examination of this application and in respect of which there may be a duty to disclose in accordance with 37 CFR § 1.56.

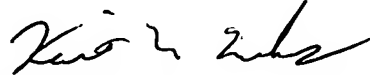
While the information submitted in this Supplemental Information Disclosure Statement may be material pursuant to 37 CFR § 1.56, it is not intended to constitute an admission that any patent, publication, or other information referred to therein is prior art for this invention unless specifically designated as such.

In accordance with 37 CFR § 1.97, this Supplemental Information Disclosure Statement is not to be construed as a representation that a search has been made or that no other possibly material information as defined under 37 CFR § 1.56(a) exists.

The patents and/or publications submitted herewith are set forth on the attached Form PTO-1449.

If the sum of \$180.00 is due under 37 CFR § 1.17(p) pursuant to § 1.97, the Commissioner is hereby authorized to charge this fee, and any other fee necessary to make this submission timely, to the Deposit Account No. 20-0782/AMAT/5730/KMT.

Respectfully submitted,



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**SUPPLEMENTAL INFORMATION
DISCLOSURE STATEMENT BY
APPLICANT**

(Use as many sheets as necessary)

Sheet

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of

1

Application Number

10/023,125

Filing Date

December 17, 2001

First Named Inventor

Yoo, et al.

Group Art Unit

1765

Examiner Name

Unknown

Attorney Docket Number

AMAT/5730/TCG/WCVD

Submission Date

September 15, 2004

U.S. PATENT DOCUMENTS

| Examiner Initials* | Cite No. ¹ | Document Number | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
|--------------------|-----------------------|------------------------------------------|--------------------------------|----------------------------------------------------|---------------------------------------------------------------------------------|
| | | Number-Kind Code ² (if known) | | | |
| | A1 | 6,635,965 | 10/21/2003 | Lee, et al. | |
| | A2 | | | | |
| | A3 | | | | |
| | A4 | | | | |
| | A5 | | | | |
| | A6 | | | | |
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NON PATENT LITERATURE DOCUMENTS

| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published | T ² |
|--------------------|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| | C1 | Yang, et al. "Atomic Layer Deposition of Tungsten Film from WF ₆ /B ₂ H ₆ : Nucleation Layer for Advanced Semiconductor Device," Conference Proceedings ULSI XVII (2002) Materials Research Society. | |
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Examiner

Date Considered

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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